FLIR®
formerly DIGIMERGE

Right for Business

DPB74TLUX

960H IR Bullet Camera

Instruction Manual

English Version 1.0

www.digimerge.com
www.flir.com/security

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet. Consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been moisture, does not operate normally, or has been dropped.

The lightning flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

In USA and Canada, Use Class 2 Power Supply Only

INFORMATION - This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING - Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

WARNING : To prevent electric shock and risk of fire hazards:
- ◆ Do NOT use power sources other than that specified.
- ◆ Do NOT expose this appliance to rain or moisture.

WARNING - The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

This installation should be made by a qualified service person and should conform to all local codes.

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General Features

- 1/3" Sony EX-View™ II 960H
- UL standard 60065 Approved
- Built-in video balun (UTP)
- Up-the-coax (UTC) OSD adjustment via remote controller*
- Polaris Vision2 low light viewing
- Smart-IR Night Vision (150ft/46m) with Adjustable LED Power Level
- 3.5-16mm Auto Iris D/N Varifocal Lens
- True Day Night with ICR mechanism (TDN)
- IP67 Weatherproof rated
- Advanced 3D Digital Noise Reduction (3D-DNR)
- ArcticPro technology for harsh climates (minimum operating temperature -40°F)
- Cold starter in -40 Degrees Fahrenheit
- Precise zoom/ focus adjustment, with included adjustment tool
- Privacy Masking / Motion Detection
- 24V AC Operation
- Service Monitor Output (BNC)
- Cable through bracket design

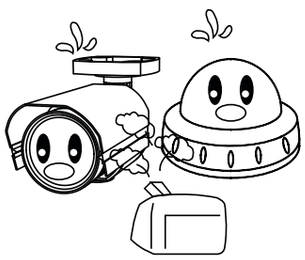
* UTC controller accessory sold separately

Precautions

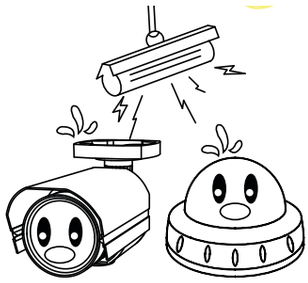
Do not install the camera in extreme temperature conditions.

Only use the camera in environments between -40°C and +50°C.

Do not install or use the camera in an environment where the humidity is high.

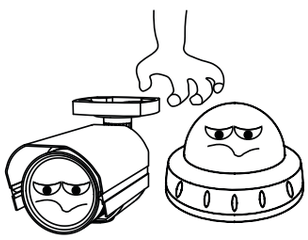


Do not install the camera under unstable lighting conditions.



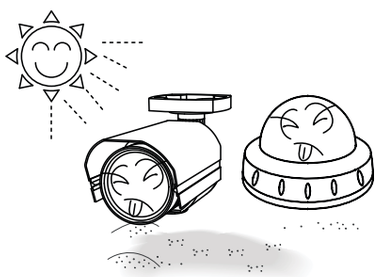
Severe lighting change or flicker can cause the camera to work improperly.

Do not touch the front lens of the camera.



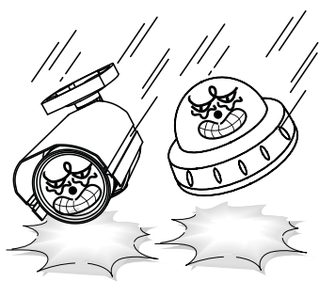
This is one of the most important parts of the camera. Be careful not to leave fingerprints on the lens cover.

Never keep the camera pointed directly at strong light.

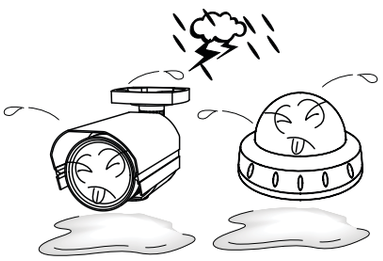


It can cause malfunctions to occur.

Do not drop the camera or subject it to physical shocks.

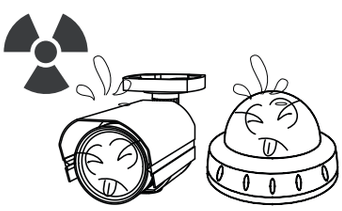


Do not expose the camera to rain or spill liquids on it.



If it gets wet, wipe dry immediately. Liquids can contain minerals that corrode the electronic components.

Do not expose the camera to radioactivity.



If exposed to radioactivity the CCD will fail.

NOTE

- If the camera is exposed to spotlight or strong lighting, smear or blooming may occur.
- Please check that the power satisfies the requirements listed in the Specifications before connecting the camera.

Safety Instructions

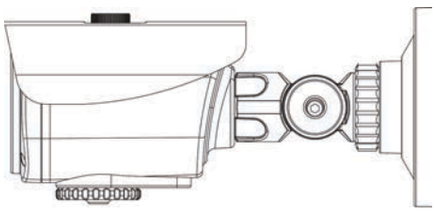
Safety precautions

- This camera should be installed by qualified personnel only.
- There are no user serviceable parts inside. Do not disassemble the camera.
- Use an appropriate low voltage power cable to prevent fire or electrical shock.
- Please ensure that your installation area can support the weight of the camera.

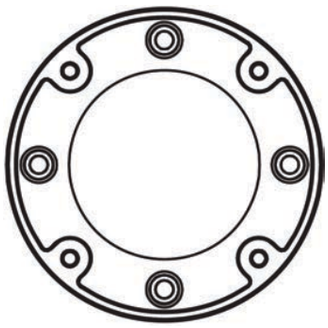
Please handle this camera carefully

- Do not use a strong or abrasive detergent when cleaning the camera.
- Do not expose the camera to direct sun.
- Do not install the camera in high humidity environments.
- Do not install the camera near cooling or heating devices.

Package Contents

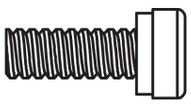


Camera (x1)



Mounting Plate (x1)

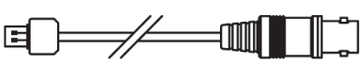
Tapping Screw
4x25 (x4)



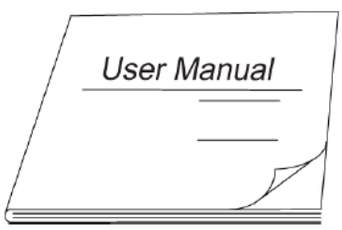
Hexagon Screw
Plate 5x10 (x4)

Allen Key (x1)

Zoom / Focus
Adjustment Tool (x1)



Test Video Cable (x1)



Instruction Manual (x1)

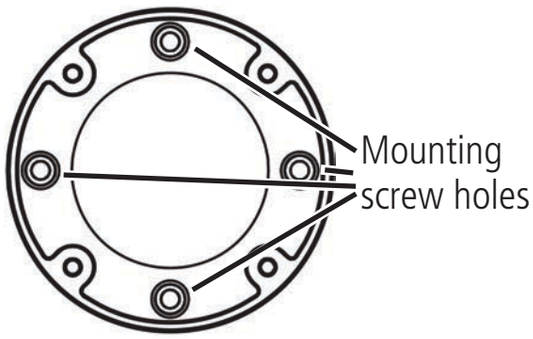
Accessories

- **MNTB74J** - Junction box mount.
- **ACCUTC1** - UTC Controller

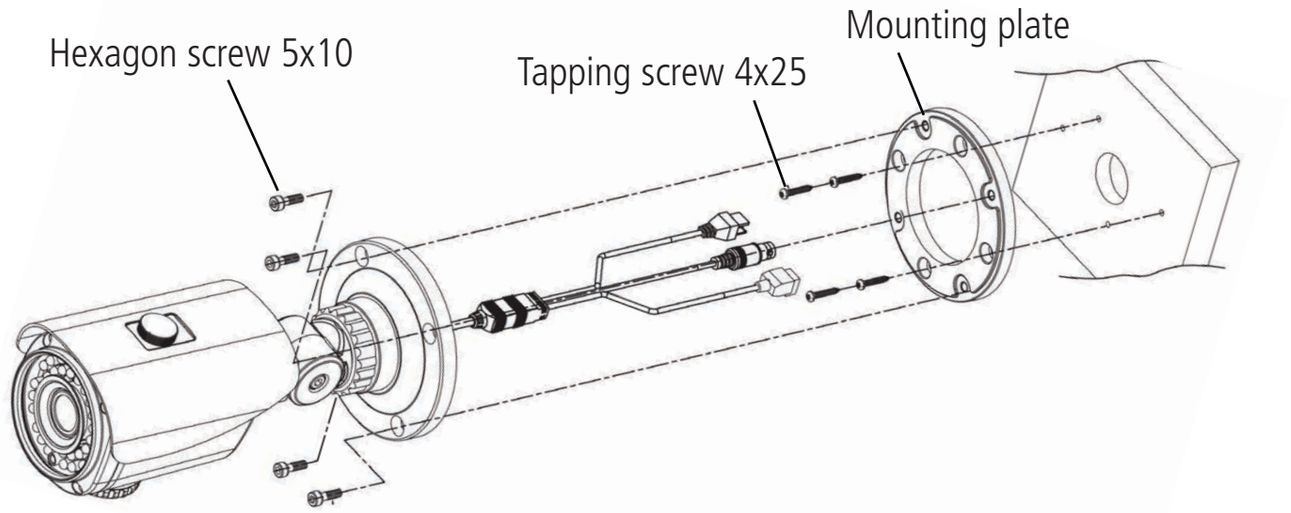
Contact your distributor for details.

Installation

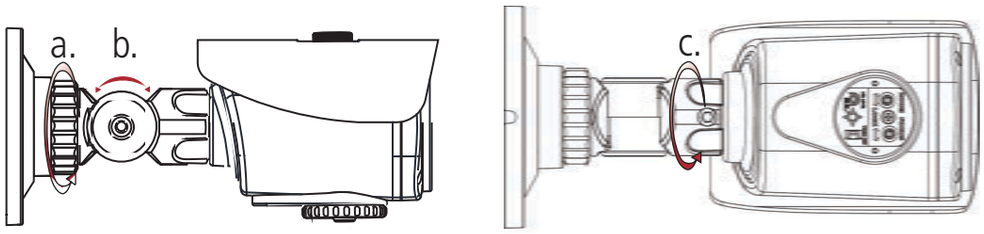
1. Use the mounting plate to drill holes for the cable and mounting screws.
2. Place the flat side of the mounting plate against the surface and attach it to the surface using the tapping screws 4x25 (4x).
3. Run the cable through the surface. Connect the cables. Attach the base of the camera to the mounting plate using the hexagon screws 5x10 (4x).



Mounting Plate



4. Adjust the position of the camera, as needed.
   a. Loosen the ring on the camera base to rotate the base 360°.
   b. Loosen the screw on the side of the camera stand to tilt the camera 180°.
   c. Loosen the screw underneath the camera stand to rotate the camera around the stand 360°.

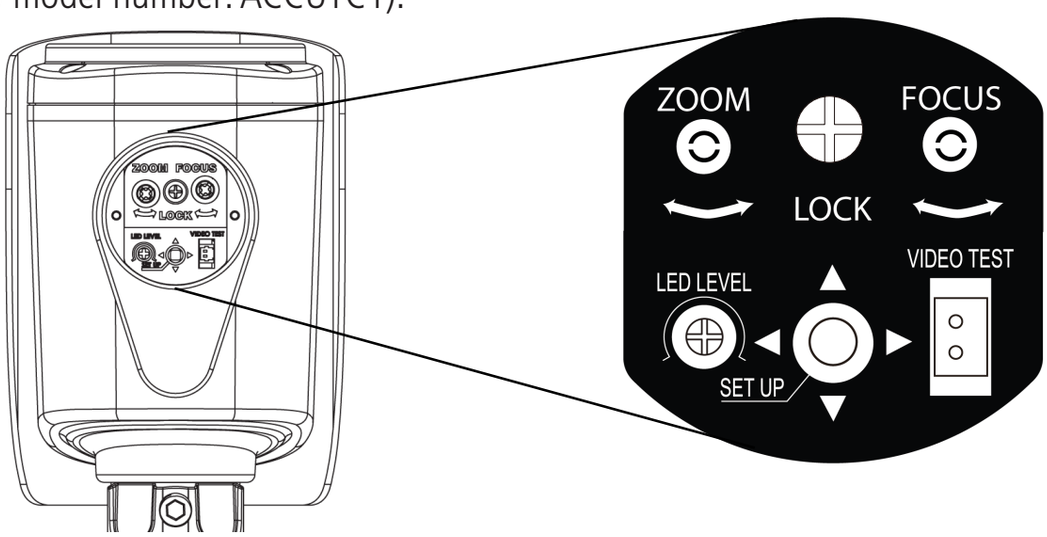


5. Unscrew the service compartment cap to adjust the zoom/focus, LED level, and OSD. If the service compartment cap is too tight, use the included allen key to loosen it.
   - (Optional) Connect the included video test cable to the **Video Test** connector to output the video to a BNC test monitor.
   - To adjust the zoom / focus, loosen the middle **Lock** screw with a philipshead screwdriver. Then turn the **Zoom** and **Focus** screws using the included zoom / focus adjustment tool or with a small philipshead screwdriver.
   - To adjust the power output to the IR LEDs, use a small philipshead screwdriver to turn the **LED Level** screw left to decrease the output or right to increase the output. It is recommended to fine tune the IR level during low light conditions to determine the best setting.

NOTE: By default, the IR LEDs are set for maximum output. For short-range installation environments, it is recommended to turn down the LED level.

   - For details on adjusting the OSD menu, see "How to Set Up the Camera Menu" on page 11.

NOTE: OSD menu can also be controlled using a UTC controller (Pelco C protocol; accessory model number: ACCUTC1).

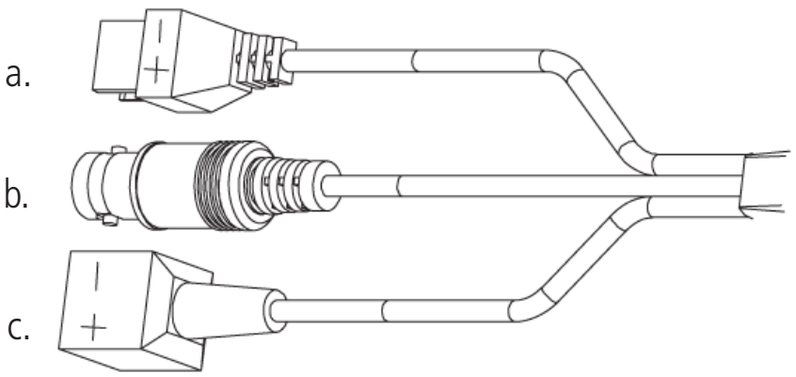


6. Close the service compartment cap and ensure all camera adjustment screws are tightened securely. You can use the included allen key to secure the service compartment cap.

Make sure the rubber seal is on the service compartment cap to ensure the weatherproof rating of the camera.

Connection

This camera supports 24V AC power only.



a. **Power:** Connect the camera to a 24V AC power source.

b. **BNC Video:** Connect the camera to the video cable. You can also control the camera OSD over the video cable using a UTC controller (Pelco C protocol).

OR

c. **UTP Video:** Connect the camera to a video balun using one pair from a UTP cable (for example, Cat 5). Make sure to match the correct polarity as marked on the balun.

How to Set Up the Camera Menu

Use the camera menu to configure image quality and other camera settings.

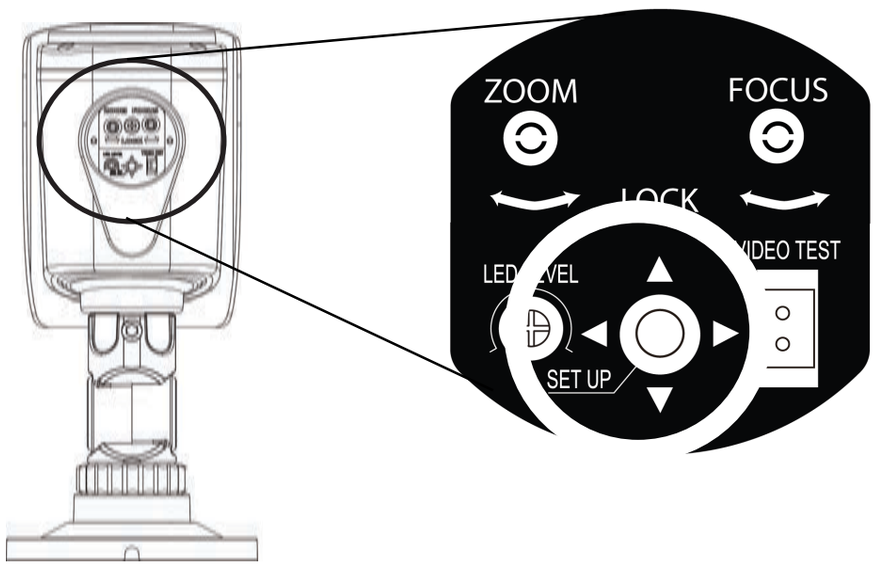
To access the camera menu:

1. Open the service compartment on the bottom of the camera.

   OR Connect a UTC controller (Pelco C protocol) to the video cable and continue running the cable to the DVR or monitor.

NOTE: Use the included allen key to lock/unlock the service compartment.

2. Press and hold the **Set Up** (middle) button to open the OSD menu.
   - Press **Up/Down** to move the menu cursor up and down and select menu items.
   - Press **Left/Right** to move the menu cursor left and right and adjust the selected menu item.
   - Press the **Set Up** button to open sub-menus or confirm selections.
3. When you are finished making changes to the menu, select **Exit** and press **Set Up**.



NOTE

- Arrow icon (↵) indicates sub-menu is available.
- **You must Exit the OSD menu to save menu changes. Otherwise, changes will not be saved if there is a power failure.**
- To save changes, return to the main OSD menu, select **EXIT**, and press the **Set Up** button. Or, in sub-menus, select **SAVE&END** and press **Set Up** to save changes and exit the OSD menu.

Menu Tree

SET UP MENU	DEFAULT SET	MENU			
LENS	DC	BRIGHTNESS	0~100 Level Selectable		
		MODE	INDOOR		
			OUTDOOR		
		RETURN	RET		
			SAVE&END		
EXPOSURE	SHUTTER	x2, x4, x6, x8, x10, x12, x14, x16, x24, x32, x64, x128, x256, AUTO, 1/60, FLK, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000, 1/20000, 1/50000 1/100000			
	AGC	OFF			
		LOW			
		MIDDLE			
		HIGH			
	SENSE-UP	AUTO	SENSE-UP(x2 ~ x256 Level Selectable)		
			RETURN	RET	
				SAVE&END	
		OFF			
	BLC	OFF			
		BLC	VALUE	LOW	
				MIDDLE	
				HIGH	
			AREA	POSITION	
				SIZE	
				AGAIN	
			DEFAULT		
			RETURN	RET	
				SAVE&END	
		HSBLC	GAIN	0 ~ 8 Level Selectable	
			MODE	ALL DAY	
				NIGHT ONLY	
			DEFAULT		
			RETURN	RET	
				SAVE&END	
	D-WDR	OFF			
		INDOOR	LOW LEVEL	0 ~ 15 Level Selectable	
			HIGH LEVEL	0 ~ 15 Level Selectable	
			RETURN	RET	
				SAVE&END	
		OUTDOOR	LOW LEVEL	0 ~ 15 Level Selectable	
			HIGH LEVEL	0 ~ 15 Level Selectable	
			RETURN	RET	
				SAVE&END	
	RETURN	RET			
		SAVE&END			
WHITE BAL	ATW				
	AWB				
	AWC->SET				
	MANUAL	BLUE	0 ~100 Level Selectable		
		RED	0 ~100 Level Selectable		
		RETURN	RET		
			SAVE&END		
DAY/NIGHT	COLOR				
	B/W	BURST	ON/OFF		
		IR SMART	ON	VALUE	0 ~ 100 Level Selectable
				AREA	POSITION
					SIZE
					RET/AGAIN
				IR DWDR	OFF / 1~15 Level Selectable
				RETURN	RET
					SAVE&END
			OFF		
		RETURN	RET		
			SAVE&END		
	AUTO	DELAY	0 ~15 Level Selectable		
		D --> N (AGC)	0 ~ 255 Level Selectable		
		N --> D (AGC)	0 ~ 255 Level Selectable		
		RETURN	RET		
			SAVE&END		
	EXT	START DELAY	0 ~15 Level Selectable		
		END DELAY	0 ~15 Level Selectable		
		RETURN	RET		
			SAVE&END		

Menu Tree (Continued)

3DNR	OFF				
	ON	LEVEL	1 ~ 200 Level Selectable		
		RETURN	RET		
			SAVE&END		
SPECIAL	CAM TITLE	ON			
		OFF			
	D-EFFECT	FREEZE	ON/OFF		
		MIRROR	MIRROR		
			V-FLIP		
			ROTATE		
			OFF		
		D-ZOOM	ON	RANGE	x1 ~ x32 Selectable
				PAN	-100 ~ 100 Selectable
				TILT	-100 ~ 100 Selectable
				RETURN	RET
					SAVE&END
			OFF		
		SMART DZOOM	OFF		
			ON	RANGE	x2 ~ x5 Selectable
				POSITION	LEFT/RIGHT/UP/DOWN
				SENSITIVITY	0 ~ 100 Level Selectable
				TIME	0 ~ 15 Level Selectable
				RETURN	RET
					SAVE&END
		DIS	ON/OFF		
		NEG. IMAGE	ON/OFF		
		RETURN	RET		
			SAVE&END		
	MOTION	ON	AREA	1 ~ 4 Selectable	
			AREA DISPLAY	ON	POSITION
					SIZE
					RET/AGAIN
				OFF	
			VALUE	0 ~ 100 Level Selectable	
			MOTION VIEW	ON/OFF	
			RETURN	RET	
				SAVE&END	
		OFF			
	PRIVACY	ON	AREA	1 ~ 8 Selectable	
			AREA DISPLAY	ON	TOP LEFT
					TOP RIGHT
					BTM LEFT
					BTM RIGHT
					POSITION
					RET/AGAIN
				OFF	
			COLOR	1 ~ 15 Selectable	
			TRANSPAR	0 ~ 3 Selectable	
			RETURN	RET	
				SAVE&END	
		OFF			
	DEFECT	SENSEUP	x4 ~ x128 Level Selectabl		
		DIFF	0 ~ 3 Level Selectable		
		THRESHOLD	0 ~ 4 Level Selectable		
		START			
		RETURN	RET		
			SAVE&END		
	DEFOG	OFF			
		MANUAL	LEVEL	0 ~ 31 Level Selectable	
			COLOR GAIN	0 ~ 10 Level Selectable	
			EDGE GAIN	0 ~ 10 Level Selectable	
			GAMMA	USER, 0.05 ~ 1.00 Level Selectable	
			RETURN	RET	
				SAVE&END	
		AUTO	DETECT LEVE	0 ~ 5 Level Selectable	
			RETURN	RET	
				SAVE&END	
	RETURN	RET			
		END			

Menu Tree

ADJUST	SHARPNESS	0 ~ 31 Level Selectable		
	MONITOR	LCD	GAMMA	USER, 0.05 ~ 1.00 Level Selectable
			LEVEL	0 ~ 63 Level Selectable
			BLUE GAIN	0 ~ 255 Level Selectable
			RED GAIN	0 ~ 255 Level Selectable
			RETURN	RET
				SAVE&END
		CRT	LEVEL	0 ~ 63 Level Selectable
			BLUE GAIN	0 ~ 255 Level Selectable
			RED GAIN	0 ~ 255 Level Selectable
			RETURN	RET
				SAVE&END
		USER	GAMMA	USER, 0.05 ~ 1.00 Level Selectable
			LEVEL	0 ~ 63 Level Selectable
			BLUE GAIN	0 ~ 255 Level Selectable
			RED GAIN	0 ~ 255 Level Selectable
			RETURN	RET
				SAVE&END
	RETURN	RET		
		SAVE&END		
RESET	FACTORY	RESET		
	RETURN	RET		
		SAVE&END		
EXIT				

Default Settings

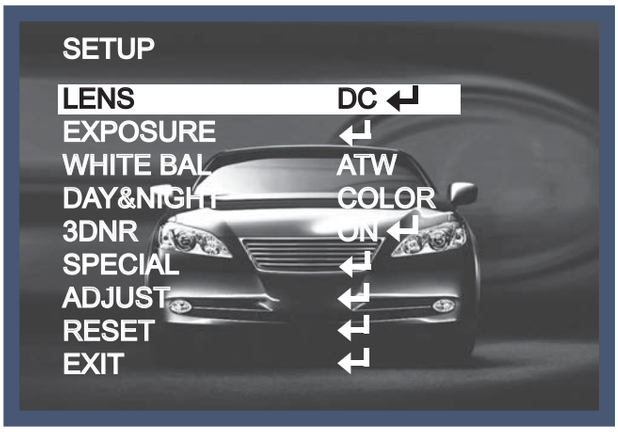
Setting	Default Value
Lens -> DC -> Brightness	50
Lens -> DC -> Mode	Outdoor
Exposure -> Shutter	Auto
Exposure -> Brightness	50
Exposure -> AGC	Middle
Exposure -> Sense-Up	X32
Exposure -> BLC	Off
Exposure -> BLC -> BLC -> Value	Middle
Exposure -> BLC -> HSBLC -> Gain	8
Exposure -> BLC -> HSBLC -> Mode	All Day
Exposure -> D-WDR	Off
Exposure -> Indoor -> Low Level	4
Exposure -> Indoor -> High Level	11
Exposure -> Outdoor -> Low Level	0
Exposure -> Outdoor -> High Level	0
White Bal	ATW
White Bal -> Manual -> Blue	28
White Bal -> Manual -> Red	16
Day&Night	EXT
Day&Night -> EXT -> Start Delay	5
Day&Night -> EXT -> End Delay	2
Day&Night -> B/W -> Burst	Off
Day&Night -> B/W -> IR Smart	On
Day&Night -> B/W -> IR Smart -> Value	50
Day&Night -> B/W -> IR Smart -> IR DWDR	2
Day&Night -> Auto -> Delay	5
Day&Night -> Auto -> D --> N (AGC)	60
Day&Night -> Auto -> N --> D (AGC)	20
3DNR	ON
3DNR -> Level	200
Special -> Cam Title	Off
Special -> D-Effect -> Mirror	Off
Special -> D-Effect -> D-Zoom	Off
Special -> D-Effect -> D-Zoom -> Range	x 2.0
Special -> D-Effect -> D-Zoom -> Pan	0
Special -> D-Effect -> D-Zoom -> Tilt	0

Setting	Default Value
Special -> D-Effect -> Smart DZoom	Off
Special -> D-Effect -> Smart DZoom -> Range	x 2.0
Special -> D-Effect -> Sensitivity	80
Special -> D-Effect -> Time	3
Special -> D-Effect -> DIS	Off
Special -> D-Effect -> Neg. Image	Off
Special -> Motion	Off
Special -> Motion -> Area	1
Special -> Motion -> Area Display	On
Special -> Motion -> Value	80
Special -> Motion -> Motion View	Off
Special -> Privacy	Off
Special -> Privacy -> Area	1
Special -> Privacy -> Area Display	On
Special -> Privacy -> Color	10
Special -> Privacy ->Transpar	3
Special -> Defect -> Sensup	X32
Special -> Defect -> Diff	2
Special -> Defect -> Threshold	1
Special -> Defog	Off
Special -> Defog -> Manual -> Level	10
Special -> Defog -> Manual -> Color Gain	3
Special -> Defog -> Manual -> Edge Gain	3
Special -> Defog -> Auto -> Detect Level	3
Adjust -> Sharpness	25
Adjust -> Monitor	LCD
Adjust -> Monitor -> LCD -> Gamma	0.55
Adjust -> Monitor -> LCD -> Level	20
Adjust -> Monitor -> LCD -> Blue Gain	100
Adjust -> Monitor -> LCD -> Red Gain	100
Adjust -> Monitor -> User -> Gamma	0.55
Adjust -> Monitor -> User -> Level	20
Adjust -> Monitor -> User -> Blue Gain	130
Adjust -> Monitor -> User -> Red Gain	130
Adjust -> Monitor -> CRT -> Level	20
Adjust -> Monitor -> CRT -> Blue Gain	110
Adjust -> Monitor -> CRT -> Red Gain	110

Lens

The Lens submenu is used to adjust the brightness of the camera.

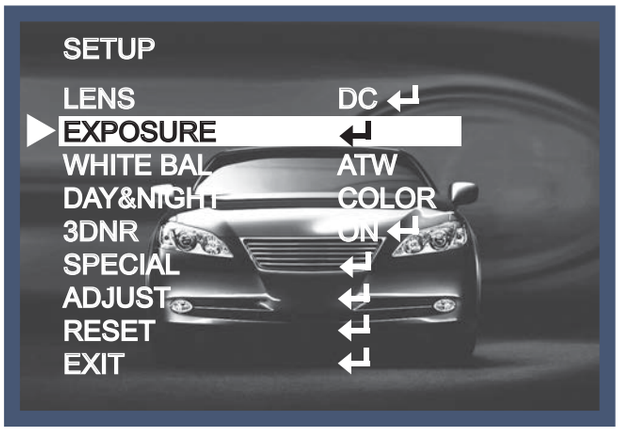
1. Press **Up/Down** to select **LENS** and then press **Set Up**.



2. Press **Up/Down** to select **BRIGHTNESS** and then **Left/Right** to adjust the brightness between 1~100.
3. Press **Up/Down** to select **MODE** and then **Left/Right** to select **INDOOR** or **OUTDOOR** depending on the installation environment.

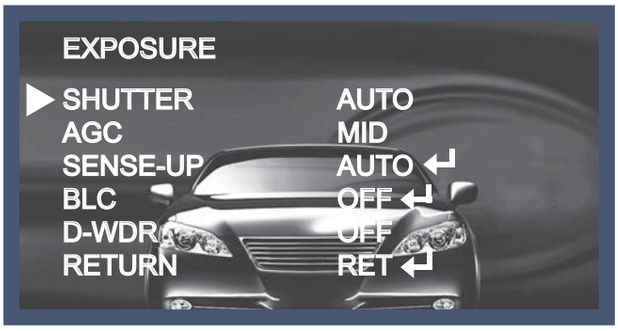
Exposure

1. Press **Up/Down** to select **EXPOSURE** and then press **Set Up**.



2. Configure the following:

- **Shutter:** Press **Left/Right** to select **AUTO** shutter speed, adjust the shutter speed between 1/60~1/100,000 or 2x~x256, or select **FLK** mode.

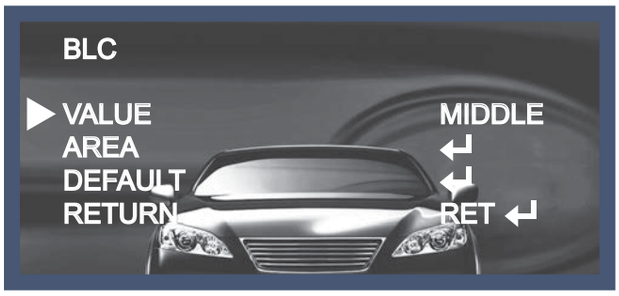


- **AGC (Auto Gain Control):** Press **Left/Right** to adjust AGC. Increasing the AGC level may increase the amount of noise in the image.
  - » **Off:** AGC disabled.
  - » **Low:** 28dB gain applied.
  - » **Mid:** 32dB gain applied.
  - » **High:** 36dB gain applied.
- **Sense-Up:** Press **Left/Right** to enable/disable Digital Slow Shutter (DSS) function. Slow Shutter uses a combination of gain and a reduction in shutter speed to compensate for decreased light levels.
  - » **Off:** DSS disabled.
  - » **Auto:** Enable DSS. Press **Set Up** and then press **Left/Right** to adjust the maximum shutter speed adjustment between 2x~256x.

NOTE

- Sense-Up is disabled if Shutter is not set to AUTO or 1/60.
- To limit ghosting effect, it is recommended to select a Sense-Up between 2x and 32x.

- **BLC (Back Light Compensation):** The camera uses auto exposure control to automatically tone down highlighted areas of the image.
  - » **Off:** Disable BLC.
  - » **BLC:** Enable BLC in a user defined area. In this mode, the camera will decrease the brightness in selected areas with highlights. Press **Set Up** to configure the BLC area and level:



    - » **Value:** Set the BLC level: **Low**, **Medium**, or **High**.
    - » **Position:** Set the area where BLC will be applied. Press **Set Up** and press **Left/Right/Up/Down** to adjust the position of the area. Press **Set Up** to confirm the area and then press **Left/Right/Up/Down** to adjust the size of the area. Press **Set Up** to confirm the size and then press **Set Up** again to return to the BLC sub-menu.
    - » **Default:** Press **Set Up** to return the BLC level and area to the default settings.
  - » **HSBLC (Highlight Suppression Back Light Compensation):** HSBLC actively blocks highlighted areas in the image. For example, when there is a car headlight turned on at the entrance of a gas station, the numbers of the car plate may be recognized by blocking the light from the car headlight. Press **Set Up** to configure HSBLC settings:

Normal

HSBLC

» **Gain:** Press **Left/Right** to adjust the gain tolerance between 1~8. The higher this value is, the brighter areas of the image will need to be for the camera to block them.

» **Mode:** Press **Left/Right** to select **ALL DAY** for **HSBLC** to be enabled in both day and night mode or **NIGHT ONLY** for HSBLC to be enabled during night mode only.

» **Default:** Press **Set Up** to return to default HSBLC settings.

- **D-WDR (Digital Wide Dynamic Range):** D-WDR automatically adjusts the light level in parts of the image to overcome strong backlight conditions.

» **Off:** Disable D-WDR.

» **Indoor:** Compensates for typical indoor lighting conditions. Press **Set Up** to adjust the Low Level and High Level for D-WDR.

» **Outdoor:** Compensates for typical outdoor lighting conditions. Press **Set Up** to adjust the Low Level and High Level for D-WDR.

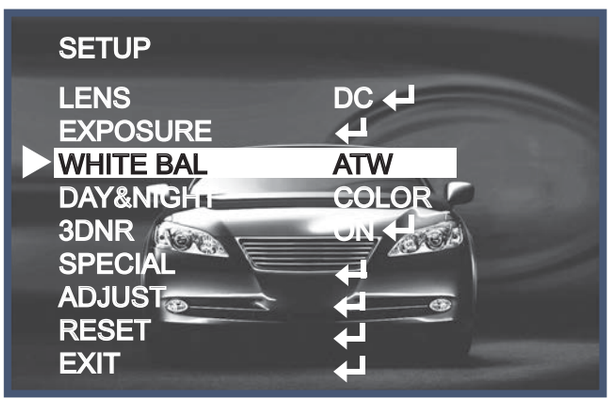
D-WDR OFF

D-WDR ON

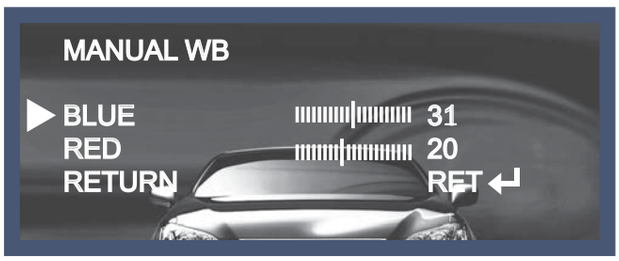
White Balance

Use the White Balance function to adjust the color of the image.

1. Press **Up/Down** to select White Bal.



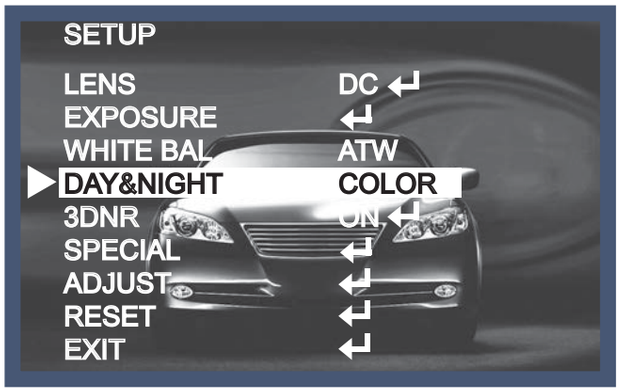
2. Press **Left/Right** to select the best White Balance mode for your installation:
    - **ATW (Auto-Trace White Balance):** Use this mode when the color temperature is between 1,800K to 10,500K.
    - **AWB (Auto White Balance):** Because ATW may not work properly in certain conditions, it is recommended to use this mode if one of the following conditions is present in your installation:
        - » When there is a very high color temperature in the image (above 10,500K; for example, clear sky or sunset).
        - » It is very dark.
        - » If the camera is pointed directly at fluorescent lighting or if there is a drastic lighting change, the operation of white balance may become unstable.
    - **AWC-->SET:** Place a white card in front of the camera lens and then press the **Set Up** button to set the white balance setting. If the lighting condition changes, you may need to re-adjust the white balance.
    - **Manual:** Use the manual option to manually adjust the blue and red levels. Press **Set Up**, then press **Left/Right** to adjust the **Blue** and **Red** levels.



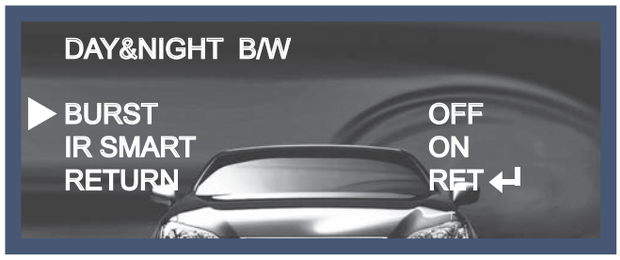
Day&Night

The Day&Night sub-menu allows you to configure day and night modes.

1. Press **Up/Down** to select **Day&Night**.



2. Press **Left/Right** to select one of the following modes:
   - **Color:** Image will always be in color (day mode).
   - **B/W:** Image will always be in black & white (night mode). Press **Set Up** to enter the B/W sub-menu.

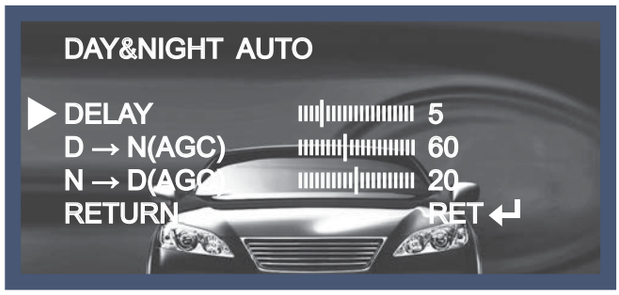


   - » **Burst:** Press **Left/Right** to select **Off** to eliminate the burst signal or **On** to allow the burst signal.
   - » **IR Smart:** Press **Left/Right** to select **On** to enable Smart IR compensation or **Off** to disable. Smart IR will prevent the image from becoming overexposed if objects come too close to the camera at night. If set to On, press **Set Up** to configure the following:
     - » **Value:** Press **Left/Right** to adjust the amount the camera will compensate for IR saturation.
     - » **Area:** Press **Set Up** to adjust the area where the camera will apply Smart IR compensation.
     - » **IR DWDR:** Press **Left/Right** to increase the level of D-WDR that will be applied for Smart IR. This will brighten areas outside of the Smart IR area.

NOTE

- Settings changed in the IR Smart menu are saved if you change Day & Night to EXT or AUTO.

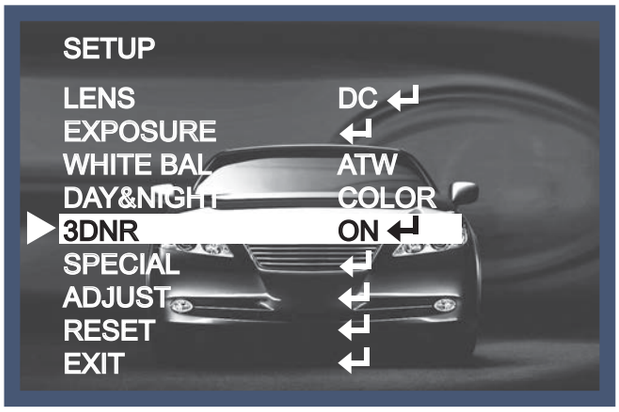
- **EXT (Recommended):** Camera uses the CdS sensor to detect lighting conditions and automatically select between day and night mode. Press **Set Up** to set the **Start Delay** and **End Delay**.
- **Auto:** Camera uses the internal sensor to detect lighting conditions and select between day and night mode. Press **Set Up** to configure the following parameters for auto day/night mode:
  - » **Delay:** Press **Left/Right** to select the delay time before the camera will switch between day and night modes.
  - » **D->N(AGC):** Select the brightness value when the camera changes from day mode to night mode.
  - » **N->D(AGC):** Select the brightness value when the camera changes from night mode to day mode.



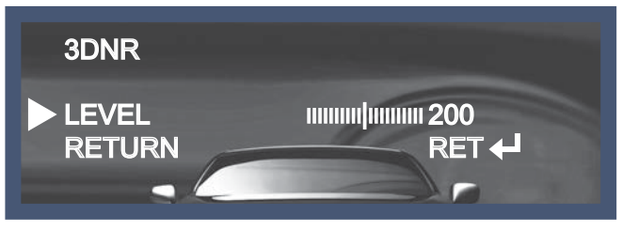
3DNR (3D-Digital Noise Reduction)

3DNR allows you to configure 3D-Digital Noise Reduction (3D-DNR). 3D-DNR reduces noise in the image during night mode.

1. Press **Up/Down** to select **3DNR**.



2. Press **Left/Right** to select **ON** to enable 3D-DNR or select **OFF** to disable. If you select **ON**, press **Set Up** to set the compensation level for 3D-DNR between 0~200.



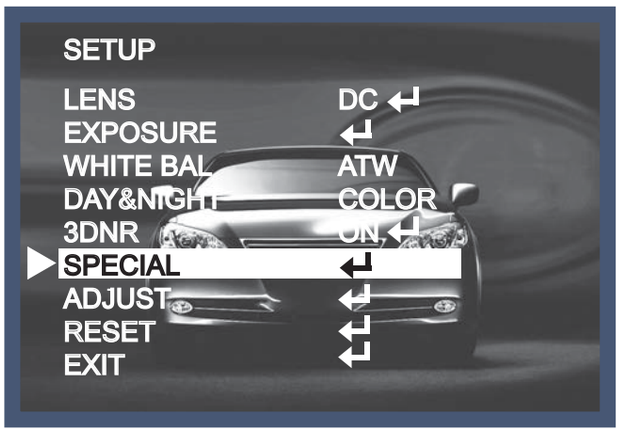
NOTE

As the level is increased, the effectiveness of the noise reduction will increase, but ghosting or a softening of the image may occur.

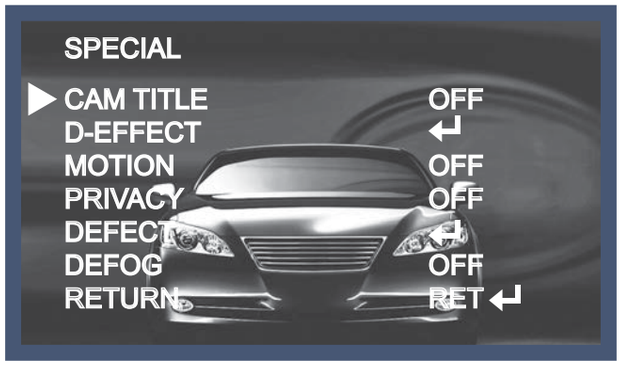
Special

The Special menu contains miscellaneous camera functions.

1. Press **Up/Down** to select **Special** and press the **Set Up** button.



The Special menu contains the following functions:



- **CAM TITLE:** Press **Left/Right** to select **OFF** to disable the camera title display on the OSD. Or, select **ON** to enable camera title display and press **Set Up** to configure the camera title. To configure the camera title, do the following:

a. Press **Up/Down/Left/Right** to control the menu cursor.

b. Press **Set Up** to enter the selected character.

c. Use the **<-** and **->** controls to edit the previous character or next character in the title.

d. Select **CLR** and press **Set Up** to erase all characters.

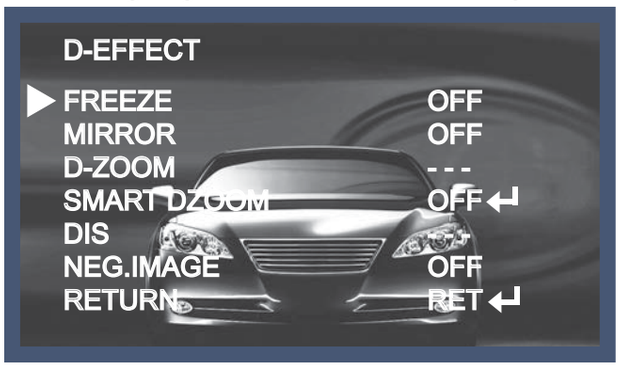
e. Select **POS** and press **Set Up** to configure the position of the camera title. Then, press **Left/Right/Up/Down** to set the position. Press **Set Up** again when finished.

f. Select **END** and press **Set Up** to save the camera title.

NOTE

If you want to enter a space or erase a letter, move the cursor on the empty space in front of the number 0 and press Set Up.

- **D-Effect:** Press **Set Up** to open the D-Effect sub-menu. This sub-menu allows you to apply the following digital effects to the image.



» **Freeze:** Press **Left/Right** to select **ON** to freeze the image in place. Select **OFF** to unfreeze the image.

» **Mirror:** Press **Left/Right** to flip the image in one of the following directions:

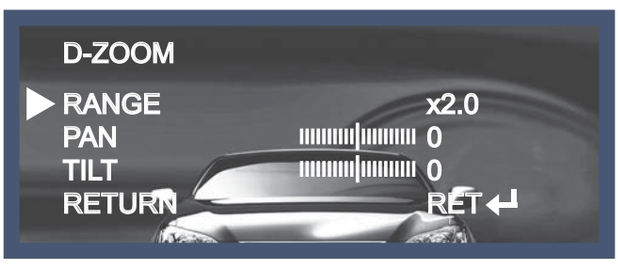
OFF

MIRROR

ROTATE

V-FLIP

» **D-Zoom:** Press **Left/Right** to select **ON** to enable digital zoom or **OFF** to disable. Press **Set Up** to configure the following:



» **Range:** Press **Left/Right** to apply 1x~32x digital zoom to the image.

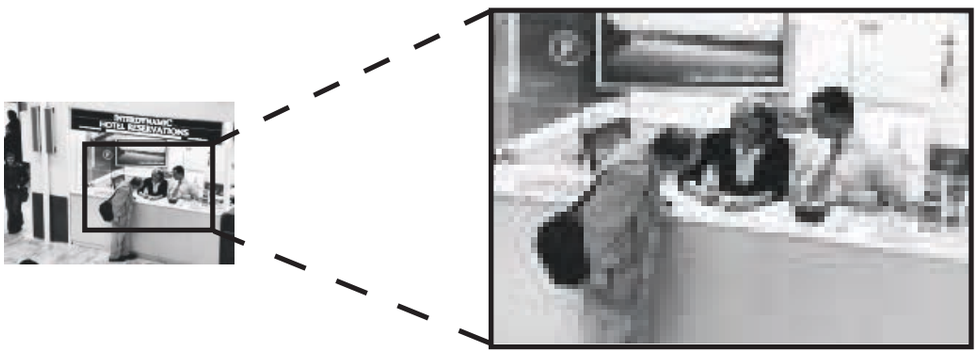
» **PAN:** Press **Left/Right** to move the zoom area left and right.

» **TILT:** Press **Left/Right** to adjust the zoom area up and down.

NOTE

- Using digital zoom will decrease the resolution of the image. It is recommended to use the zoom/focus screws to zoom in the image without losing resolution.
- When D-Zoom is enabled, Smart Dzoom, and DIS cannot be used.

» **SMART DZOOM:** Smart DZoom automatically digitally zooms the camera when there is motion detected in a certain area. Press **Left/Right** to select **ON** to enable Smart DZoom or **OFF** to disable. Then press **Set Up** to configure the following parameters:



- » **Range:** Press **Left/Right** to apply 2x~5x digital zoom to the image.
- » **Position:** Press **Set Up** and then press **Left/Right/Up/Down** to adjust the zoom area. Press **Set Up** to confirm the area.
- » **Sensitivity:** Press **Left/Right** to adjust the sensitivity of motion detection for Smart DZoom.
- » **Time:** Press **Left/Right** to adjust the time the camera will maintain the zoom before zooming out.

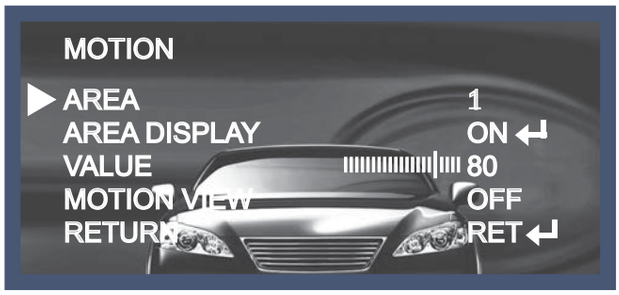
» **DIS (Digital Image Stabilizer):** DIS compensates for unclear images caused by windy conditions or vibrations in the installation area. Press **Left/Right** to select **ON** to enable DIS or **OFF** to disable.

DIS OFF

DIS ON

» **Neg. Image:** Press **Left/Right** to select **ON** to invert the colors in the image (makes the image look like a photo negative). Or select **OFF** for a normal image.

- **MOTION:** You can set motion detection to highlight specific areas of the screen when motion is detected. Press **Left/Right** to select **ON** to enable motion detection or **OFF** to disable. If you select **ON**, press **Set Up** to configure the following parameters:



TIP

- Motion detection settings are generally set separately on the DVR, where they can trigger motion recording or other actions.

  » **Area:** Press **Left/Right** to select areas **1~4**.

  » **Area Display:** Press **Left/Right** to select **ON** to enable the selected area or select **OFF** to disable the selected area. To configure the area:

  a. If **ON** is selected, press **Set Up**.

  b. Press **Left/Right/Up/Down** to configure the position of the motion area and then press **Set Up** to confirm.

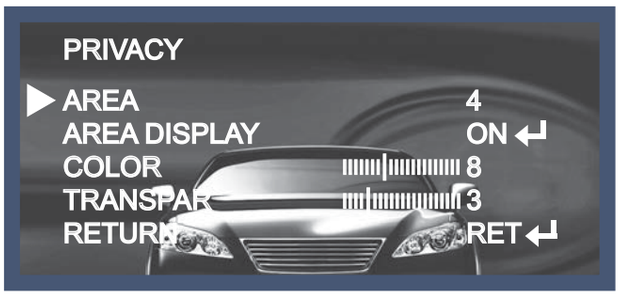
  c. Press **Left/Right/Up/Down** to configure the size of the motion area and then press **Set Up** to confirm.

  d. Press **Set Up** again to save changes.

  » **Value (Sensitivity):** Press **Left/Right** to adjust the sensitivity of the motion detection. The higher the setting "Value" is, the higher the sensitivity for motion.

  » **Motion View:** Press **Left/Right** to select **ON** to show highlights on the monitor when the camera detects motion in the motion areas.

- **Privacy:** This allows you to hide up to 8 privacy areas on the monitor. **Areas designated as privacy areas will not be recorded.** Press **Left/Right** to select **ON** to enable privacy areas or **OFF** to disable. If **ON** is selected, press **Set Up** to configure the following:



» **Area:** Press **Left/Right** to select privacy area **1~8**.

» **Area Display:** Press **Left/Right** to select **ON** to enable the selected area or select **OFF** to disable the selected area. To configure the area:

a. If **ON** is selected, press **Set Up**.

b. Press **Left/Right/Up/Down** to configure the corners of the privacy area and then press **Set Up** to go to the next corner.

c. Press **Left/Right/Up/Down** to configure the position of the privacy area and then press **Set Up**.

d. Press **Set Up** again to save the privacy area.

» **Color:** Press **Left/Right** to select color **0~15**.

» **Transparency:** Press **Left/Right** to set the transparency of the motion area between **0~3**.

• **Defect:** Use the Defect setting to remove white spots (defects). The camera can eliminate up to 256 points. Press **Set Up** and then configure the following.

» **Senseup:** Press **Left/Right** to set the level of defect elimination. 32x is recommended.

» **Diff:** Press **Left/Right** to set the size of defects between 0~3.

» **Start:** Select **Start** and press **Set Up** to start defect correction.

• **Defog:** The Defog feature improves the picture of objects obscured by fog or dust. Press **Left/Right** to select **Manual** or **Auto** to enable or **OFF** to disable.

DEFOG OFF

DEFOG ON

» **Auto:** Automatic defog settings. Press **Set Up** and then press **Left/Right** to adjust the Detect Level. A higher level will increase the compensation for heavier fog.

» **Manual:** Manual defog settings. Press **Set Up** to configure defog settings.

Adjust

This function is needed to control the brightness of the monitor.

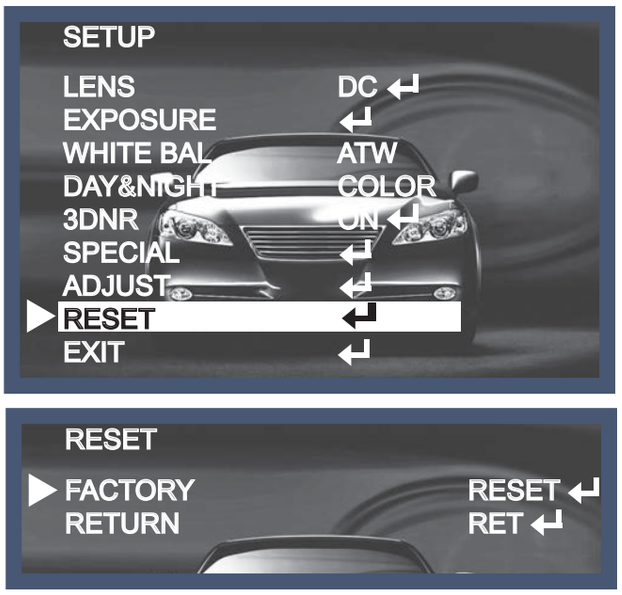
1. Press **Up/Down** to select **Adjust** and then press the **Set Up** button. Configure the following:

- **Sharpness:** Press **Left/Right** to adjust the sharpness of the image, as needed. Increasing sharpness will make the outlines of the image more distinct.
- **Monitor:** Press **Left/Right** to select one of the following, depending on the type of monitor you have.
  - » **LCD:** Recommended if you are using an LCD monitor. Press **Set Up** to configure the **Gamma**, **Level**, **Blue Gain**, and **Red Gain**.
  - » **CRT:** Recommended if you are using a CRT monitor. Press **Set Up** to configure the **Level**, **Blue Gain**, and **Red Gain**.
  - » **User:** Custom monitor settings. Press **Set Up** to configure the **Gamma**, **Level**, **Blue Gain**, and **Red Gain**.

Reset

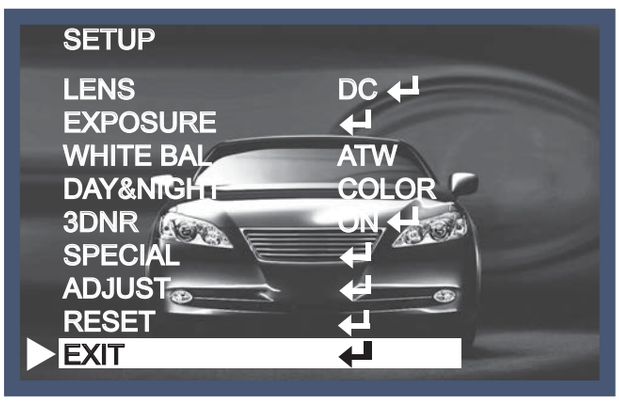
Use the Reset function to reset the camera to factory default settings. This is recommended if you end up with an unclear or unsatisfactory picture due to setting changes.

1. Press **Up/Down** to select **Reset** and press **Set Up**.
2. Press **Up/Down** to select **Factory** and press **Set Up**.



Exit

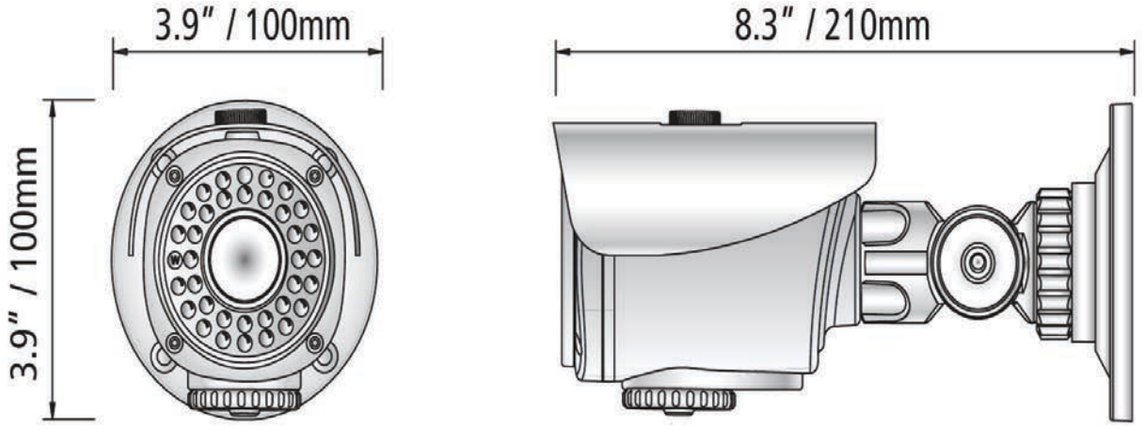
Press **Up/Down** to select **Exit** and press **Set Up** to save the current settings and exit the OSD menu.



Specifications

	DPB74TLUX
Sensor Type	1/3″ Sony EX-View™ II 960H CCD
Effective Pixels	976 (H) X 494 (V)
Total Pixels	1020 (H) X 508 (V)
Resolution	700+TVL
Scanning System	2:1 Interlace
Minimum Illumination	0.01 LUX @ F1.2 0 LUX /w IR LED on
Video Output	1.0Vp-p Composite @ 75 Ohms
S/N Ratio	52db @ AGC off
Lens	3.5mm~16mm F1.2 Varifocal DC Auto Iris
Power Source	AC 24V +10%
Power Consumption	11W without heater 24W with heater
Minimum Power Requirement	450mA without heater 1A with heater
Power Input	2-pin terminal block detachable
Communication	Coaxial I/F (UTC) UTP
IP Rating	IP67
Operating Humidity	Within 95% RH
Operating Temperature	-40~122°F / -40~50°C
Weight	1.8lbs / 0.8kg

Dimensions



Troubleshooting

PROBLEM	POSSIBLE CAUSE
Nothing appears on the screen.	• Check the power and video connection to the camera. • Ensure sufficient power is being supplied to the camera.
The image on the screen is unclear.	• Adjust the lens zoom and focus. • The lens cover is dirty. Clean the lens / glass with a soft clean cloth. • Reset the camera to default settings. • If the camera is facing a very strong light, move the camera to a different position. • Ensure DZOOM is not enabled.
The image on the screen is dark.	• Adjust the brightness and contrast controls on the monitor/DVR. • If there is an intermediate device, ensure it is set to 75Ω/Hi z.
The image is overexposed at night.	• Turn the LED Level screw to the left to reduce the power output to the IR LEDs. It is recommended to fine tune the LED Level to find the best setting.
The camera is not working properly and the surface of the camera is hot.	• Check the camera is correctly connected to an appropriate regulated power source.
The color of the picture is not correct.	• Make sure that the camera isn't facing direct sunlight or fluorescent lighting. If necessary, change the camera position.
The SENSE-UP does not work.	• Check that the AGC setting in the EXPOSURE menu isn't set to OFF. • Check the EXPOSURE menu and make sure SHUTTER is set to AUTO or 1/60.

FLIR
DIGIMERGE

Need Help?

Please make sure to visit our website www.digimerge.com to receive product updates and information.

3 Easy Ways To Contact Us

Online:
Product support is available 24/7 including product information, user manuals, quick start up guides and FAQ's at www.digimerge.com

By Email:
Technical support (for technical/installation issues)
tech@digimerge.com

By Phone:
North America: 1-866-816-5919
Technical support (for technical/installation issues)
Mon-Fri 8.00 am to 8.00pm EST

We welcome your feedback at
info@digimerge.com

For more information, visit
www.digimerge.com